

plates of the sides, where, instead of being on the centre, they are situated on the inner margins. Although the specimen is very young—less than an inch in length—the spots are already wanting on some of the plates, probably vanishing with age.

This species is deeply interesting, and especially so to the members of this Society, on account of its very limited geographical distribution, being confined probably to a radius of about 50 miles from the city of Philadelphia. Probably it is in a slow progress towards extinction, and an entire disappearance from the earth; and hence it is plainly important to science that there should be an immediate investigation of the exact boundaries of its distribution, so that hereafter from time to time its course towards an ultimate annihilation may be clearly seen.

Besides being, as already known, one of the smallest of turtles—rather smaller than the *Nanemys guttata*—it is quiet and mild in its habits, not at all ferocious, though its food consists chiefly of insects, and in a smaller degree of vegetation. It frequents meadows in the vicinity of streams. As the cultivation of the land becomes more complete, its haunts will be diminished, its food lessened, and its numbers decreased.

While this genus is confined to a small distance of the borders of the Delaware River, the great confluent of the Delaware Bay, it is remarkable that a species of another genus—the *Ptychemys rugosa*—is confined to the confluent of the nearly adjoining Chesapeake Bay.

June 18th.

Vice-President BRIDGES in the Chair.

Twenty-two members present.

An announcement was made of the death of Francis Peters, Esq., a member of the Academy, at Paris, France, on the 19th of May.

June 25th.

Vice-President BRIDGES in the Chair.

Twenty-two members present.

On report of the respective Committees, the following were ordered to be published in the Proceedings:

Descriptions of new species of *Cyrena*, *Corbicula* and *Sphærium*.

BY TEMPLE PRIME.

1. *Cyrena Cypriæformis* Prime. C. testa ovato-suborbiculari, valde inaequilaterali, turgida, crassa, epidermide viridi-nigrescente vestita; umbonibus minimis, oblique antice curvatis, acutis, parum prominentibus; latere antico brevi, rotundato, postice subtruncato; lamina cardinali lata; dentibus cardinalibus elongatis, prominentibus, apice profunde furcatis; dentibus lateralibus brevibus, antice crasso, conico.

Long. 91; lat. 85; diam. 60 mill.

Hub.—Northern Australia. (Collect. Cuming et Prime.)

This large species is somewhat allied to the *Cyrena Cyprioides* Quoy; it is, however, less triangular in its general appearance, and its beaks are less inflated.

2. *Cyrena laevis* Prime. C. testa orbiculato-trigona, depressiuscula, inaequilaterali, tenui, minuta; epidermide viridi-glaescente vestita; regulariter transversim striata; latere antico obtuso, margine superiore postice con-

1861.]

vexo inferiore, arcuato; umbonibus parvis, depressis, obliquis, approximatis, detorticeis; ligamento elongato; valvis tenuis, intus candidissimis; cardine angusto, inaequaliter tridentato; dentibus cardinalibus obliquis minutis, mediano et postico dente valvae dextrae bifidis; dentibus lateralibus parum elongatis brevibus.

Long. 46; lat. 42; diam. 22 mill.

Hab.—Borneo. (Collect. Prime.)

This light and delicate species seems different from any other that has come under my notice.

3. *Cyrena regularis* Prime. C. testa ovato-rotundata, tumida, cordiformi, valde inaequilaterali; epidermide viridi vestita; latere antico acuto, postico subtruncato, latere supero posticali sulco sinuoso decurrente separato; umbonibus tumidis, brevibus; ligamento angusto; valvis intus albis; cardine utroque latere tridentato; dentibus cardinalibus obliquis, mediano et postico dente valvae dextrae bifidis; dentibus lateralibus brevibus, antico crasso, conico, apice acuto.

Long. 78; lat. 69; diam. 40 mill.

Hab.?—(Collect. Prime.)

Somewhat similar in general appearance to the *Cyrena Caledonica* Gassies; it is, however, anteriorly more angular, the body of the shell is more inflated, the beaks are more prominent, and the epidermis is smoother and more regular.

4. *Cyrena Siamensis* Prime. C. testa ovato-transversa, subtrigona, inaequilaterati, convexa, postice subtruncata, antice valde declivi, crassa, solida, in medio convexa; epidermide fusca induta; irregulariter striata; valvis intus albis; umbonibus depressis, brevibus, saepius erosis; dentibus cardinalibus tribus, obliquis, approximatis, fere parallelis, superne canaliculatis; dentibus lateralibus subaequalibus.

Long. 61; lat. 47; diam. 27 mill.

Hab.—Siam. (Collect. Cuming et Prime.)

Nearly allied to the *Cyrena Sumatrensis* Sowerby, from which it differs, however, in being less inflated, smaller and generally less ponderous.

5. *Cyrena Bernardiana* Prime. C. testa ovato-transversa, trigona, inaequilaterati, tumida, crassa, in medio ventricosa, margine superiore arcuato; epidermide viridi vestita; regulariter striata; umbonibus parvis elevatis; ligamento elongato, partim infosso; valvis solidis, intus candidissimis; cardine angusto, inaequaliter tridentato; dentibus cardinalibus angustis; dentibus lateralibus elongatis.

Long. 65; lat. 49; diam. 38 mill.

Hab.—New Caledonia. (Collect. Cuming et Prime.)

I dedicate this species to the Chevalier Bernardi of the Conchological Journal of Paris.

6. *Corbicula erosa* Prime. C. testa trigona, subaequilaterali, tumida, crassa, solida, transversim irregulariter striata; epidermide nigrescente vestita; latere antico brevi, postico obtuso; margine inferiore parum arcuato; umbonibus inflatis, erosis; cardine incrassato, tridentato; dentibus cardinalibus crassis; dentibus lateralibus aequalibus, serrulatis.

Long. 20; lat. 18; diam. 13 mill.

Hab.—Cambodia. (Collect. Cuming, Jay et Prime.)

Compared to the *Corbicula Lydigiana* Nobis, the only species to which it seems at all allied, it is less elevated, not so triangular in appearance, its lines of growth are less regular and deeper, its epidermis is darker and rougher.

7. *Corbicula brunea* Prime. C. testa ovato-transversa, subaequilaterali, extremitatis aequaliter obtusa, transversim striata, sulcis regularibus; epi-

[June,

dermide brunea vestita; umbonibus parvis, integris, laevigatis; intus violacea; cardine tridentato; dentibus lateralibus aequalibus.

Long. 22; lat. 19; diam. 12 mill.

Hab.—Scamander River. (Collect. Prime.)

8. *Corbicula rhomboidea Prime*. C. testa ovato-transversa, subaequilaterali, tumidula, utraque extremitate obtusa, transversim striata, sulcis profundis et regularibus; epidermide fuscescens vestita; umbonibus tumidis, erosis; intus candida ad margines pallide coerulea; cardine incrassato, inaequaliter tridentato; dentibus lateralibus aequalibus, praelongis, tenuissime striatis.

Long. 24; lat. 21; diam. 14 mill.

Hab.—Malacca. (Collect. Cuming et Prime.)

Compared to the *Corbicula brunea Nobis*, it is heavier, more inflated, the beaks are fuller, both cardinal and lateral teeth are broader and stronger, the color of the interior of the valves is of a lighter shade; the epidermis is darker and the lines of growth are a little heavier.

9. *Corbicula notata Prime*. C. testa ovato-transversa, tumidiuscula, tenui, aequilaterali; utraque extremitate aequaliter obtusa; valvis intus viride violaceis; epidermide viridi vestita; transversim sulcata; sulcis distantibus; umbonibus parvis, turgidulis, integris; cardine angusto; dentibus cardinalibus tribus, inaequalibus, divergentibus; dentibus lateralibus angustis, arcuatis.

Long. 18; lat. 14; diam. 10 mill.

Hab.—Philippines. (Collect. Cuming, Jay et Prime.)

Very nearly allied to the *Corbicula tumida Deshayes*; it is, however, lighter of texture, more equilateral, less inflated, the beaks are smaller, the lines of growth are not quite so heavy and more numerous; the cardinal teeth are more distinct.

10. *Corbicula minor Prime*. C. testa ovato-transversa, depressiuscula, tenui, subaequilaterali, extremitatibus rotundata; umbonibus prominentibus, erosis; sulcis regularibus; epidermide virescente vestita; intus violacea; dentibus primariis crassis; lateralibus subaequalibus.

Long. 15; lat. 11; diam. 7 mill.

Hab.?—(Collect. Prime.)

Compared to the *Corbicula inaequilaterali Nobis*, this species is more equilateral and less elongated.

11. *Corbicula parvula Prime*. C. testa ovato-transversa, depressiuscula, tenui, aequilaterali, extremitatibus rotundata; umbonibus magnis, tumidis, erosis; sulcis irregularibus; epidermide viridi flavescens, irregulariter maculata vestita; intus pallide violacea; dentibus primariis crassis, lateralibus aequalibus.

Long. 12; lat. 10; diam. 5 mill.

Hab.—India. (Collect. Prime.)

12. *Corbicula subradiata Prime*.

Cyrena subradiata Kurr., in litt.

C. testa trigona, aequilaterali, compressiuscula, antice paulo latiore et obtusiore, striis regularibus, distantibus, epidermide viridi, nitente induta; intus pallide violacea; umbonibus minimis, acutis antice obliquatis, violaceo-subradiatis; cardine angusto, dentibus primariis crassis.

Long. 14; lat. 12; diam. 7 mill.

Hab.—India. (Collect. Prime.)

Very closely allied to the *Corbicula radiata Deshayes*, from the Nile, it differs in being less inflated, more oval shaped, the beaks are less full and more acute.

13. *Corbicula solidula Prime*. C. testa ovato-trigona, crassula, aequi-
1861.]

lateralis, tumidula; striis regularibus distantibus; epidermide flavescente induta; valvis solidiusculis, intus albis, umbonibus prominentibus, erosis, cardine crasso, tridentato.

Long. 11; lat. 10; diam. 6 mill.

Hab.?—(Collect. Prime.)

14. *Corbicula violacea Prime*. C. testa ovato-transversa, subaequilaterali, obliqua, extremitatibus aequaliter obtusa, transversim irregulariter striata; epidermide squalide virescente vestita; umbonibus magnis, obliquis, erosis, intus profunde violacea; cardine angusto tridentato.

Long. 15; lat. 13; diam. 8 mill.

Hab.?—(Collect. Jay et Prime.)

15. *Corbicula Agrensis Prime*.

Cyrena Agrensis Kurr., in litt.

C. testa ovato-transversa, aequilaterali, laevigata, depressiuscula, extremitatibus rotundata; epidermide viridi-olivacea induta; sulcis regularibus, distantibus; intus pallide violacea; umbonibus tumidis, erosis; cardine angusto, dentibus cardinalibus crassis, lateralibus aequalibus, tenuiter serrulatis.

Long. 9; lat. 8; diam. 5 mill.

Hab.—Agra, India. (Collect. Prime.)

16. *Corbicula inaequilateralis Prime*. C. testa ovato-transversa, depressiuscula, tenui, inaequilaterali; extremitatibus rotundata; umbonibus prominentibus, approximatis, antice obliquatis, violaceo subradiatis; sulcis regularibus, intus pallide violacea; epidermide pallide virescente induta; cardine angusto; dentibus cardinalibus crassis, lateralibus inaequalibus.

Long. 16; lat. 12; diam. 8 mill.

Hab.—Africa. (Collect. Prime.)

17. *Sphaerium Vermontana Prime*. S. testa ovato-trigona, tumida, inaequilaterali, striis regularibus, epidermide viridi-flavescente vestita; umbonibus tumidis; cardine arcuato; dentibus lateralibus crassis.

Long. 11; lat. 10; diam. 7 mill.

Hab.—Vermont, N. America. (Collect. Prime.)

This species, though somewhat allied to *Sph. striatinum Lam.*, is much more inequilateral.

Descriptions of new Palæozoic Fossils from Illinois and Iowa.

BY F. B. MEEK AND A. H. WORTHEN,

Of the Illinois State Geological Survey.

ECHINODERMATA.

CRINOIDEA.

Genus *FLATYCRINUS*, Miller, 1821.

FLATYCRINUS OWENI.—Body rather large, cup-shaped, or sub-hemispherical below the summit of the first radials, rounded on the under side, height about two-thirds the breadth. Base saucer-shaped, or nearly four times as wide as high, pentagonal in outline, the sides being nearly straight or slightly concave, sutures anchylosed; columnar facet large, its breadth equalling about half that of the base, concave, margined by a slightly raised somewhat undulated rim, and perforated by a large central opening. First radial plates large, sub-quadrangular in general outline, but having the superior lateral angles truncated for the reception of the anal and interradial pieces, widening a little from the base upwards; facet for the reception of the second radial pieces

[June,